

SEQUENCE LISTING

<110> Mulligan, John T. Tabone, John C. <120> METHODS FOR IMPROVING THE SEQUENCE FIDELITY OF SYNTHETIC DOUBLE-STRANDED OLIGONUCLEOTIDES <130> 340078.401 <140> 09/872,761 <141> 2001-06-01 <160> 15 <170> FastSEQ for Windows Version 4.0 <210> 1 <211> 205 <212> DNA <213> Artificial Sequence <220> <223> 205 base pair segment of the lacI gene sequence synthesized using overlapping double-stranded oligonucleotides <400> 1 aattcataaa ggagatatca tatgaaaccg gtaacgttat acgacgtcgc tgaatacgcc 60 ggcgtttctt accagaccgt ttctagagtg gttaaccagg cttcacatgt tagcgctaaa 120 acccgggaaa aagttgaagc tgccatggct gagctcaact acatcccgaa ccgtgttgcg 180 cagcagctgg ctggtaaaca aagct <210> 2 <211> 25 <212> DNA <213> Artificial Sequence <220> <223> Modified oligonucleotides containing 2,6 diaminopurine <221> modified base $\langle 222 \rangle$ (11)...(11) <223> n = 2,6-diaminopurine <400> 2 accgtttcta nagtggttaa ccagg 25 <210> 3 <211> 25 <212> DNA

```
<213> Artificial Sequence
  <220>
 <223> Modified oligonucleotides containing 2,6
        diaminopurine
 <221> modified base
 <222> (13)...(13)
 <223> n = 2,6-diaminopurine
 <400> 3
 accgtttcta gantggttaa ccagg
                                                                     25
 <210> 4
 <211> 25
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Modified oligonucleotides containing 2,6
       diaminopurine
 <221> modified_base
 <222> (8)...(8)
 <223> n = 2,6-diaminopurine
 <400> 4
 ggaaaaantt gaagctgcca tggct
                                                                     25
<210> 5
<211> 26
<212> DNA
<213> Artificial Sequence
<220>
<223> Modified oligonucleotides containing 2,6
      diaminopurine
<221> modified base
<222> (3)...(3)
<223> n = 2,6-diaminopurine
<400> 5
ttncgcagca gctggctggt aaacaa
                                                                    26
<210> 6
<211> 25
<212> DNA
<213> Artificial Sequence
<223> Modified nucleotides containing uracil.
<400> 6
```

tgaagcctgg ttaaccactu tagaa	25
<210> 7 <211> 25 <212> DNA	
<213> Artificial Sequence	
<220> <223> Modified nucleotides containing uracil.	
<400> 7 agctcagcca tggcagcttc aautt	25
<210> 8 <211> 25 <212> DNA <213> Artificial Sequence	
<220> <223> Modified nucleotides in which uracil was substituted for adenosine.	
<400> 8 agctcagcca tggcagcttc auctt	25
<210> 9 <211> 26 <212> DNA <213> Artificial Sequence	
<220> <223> Modified nucleotides in which uracil was substituted for adenosine.	
<400> 9 ttgcgcugca gctggctggt aaacaa	26
<210> 10 <211> 197 <212> DNA <213> Artificial Sequence	
<220> <223> Fragment of the lacI gene sequence.	
<pre><400> 10 cataaaggag atatcatatg aaaccggtaa cgttatacga cgtcgctgaa tacgccggcg tttcttacca gaccgtttct agagtggtta accaggcttc acatgttagc gctaaaaccc gggaaaaagt tgaagctgcc atggctgagc tcaactacat cccgaaccgt gttgcgcagc agctggctgg taaacaa</pre>	
<210> 11 <211> 48 <212> DNA	

<213> Artificial Sequence	
<220> <223> Control synthetic 48 bp sequence	
<400> 11	
attogecett tgecactaag caccagegaa aeggtaetta eegacaeg	48
<210> 12	
<211> 47 <212> DNA	
<213> Artificial Sequence	
<220>	
<223> 48mer containing synthesis byproducts	
<400> 12	
attegeeett tgeeactaag caceagegaa aeggtaetae egaeaeg	47
<210> 13	
<211> 49 <212> DNA	
<213> Artificial Sequence	
<220>	
<223> 48mer containing synthesis byproducts	
<400> 13	
attogocott tgccactaag caccagogaa acggtacttt accgacacg	4.0
<210> 14	49
<211> 48	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> 48mer containing synthesis byproducts	
<400> 14	
attegeeett tgeeactaag caceagegaa aeggtaettg eegaeaeg	48
<210> 15	
<211> 48	
<212> DNA <213> Artificial Sequence	
<220>	
<223> 48mer containing synthesis byproducts	
<400> 15	
attegeeett tgeeactaag caceagegaa aeggtaetta gegaeaeg	48